

## **Statement of transcriptomics and bioinformatics analyses conducted at CIRAD in rubber tree: towards the genome analysis**

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### **ABSTRACT**

During the last years, the cost of sequencing technology decreased a lot, and consequently, data produced by “OMICS” projects on tropical crops increased exponentially. That's why novel methods have been developed at CIRAD for the analysis and storage of data related to these huge projects. We present here bioinformatics resources and analyses conducted at CIRAD on *Hevea brasiliensis* transcriptome and genome. The Expressed Sequenced Tag Treatment and Investigation Kit (ESTtik) is a tool dedicated to analyse and store results from data processing of cDNA. TropGeneDB is a database that manages genetic and genomic information about tropical crops studied by Cirad. The database is organised into crop specific modules and Rubber tree data contained into the database will be described. At last, GnpAnnot is a project on green genomics which intends to develop a platform of structural and functional annotation supported by comparative genomics and dedicated to plant and bio-aggressor genomes allowing both automatic predictions and manual curation of genes and transposable elements. This platform will be used for the manual genome annotation of many tropical crops (cocoa, coffee, banana) and could supported the analysis of the Ruber tree genome.